

## REMARKS

Claims 1-15 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Elson, *et al.* (U.S. Publication No. 2003/0014521) (hereafter 'Elson'). As will be shown below, Elson does not anticipate control of collaborative devices as claimed in the present application. Claims 1-15 are therefore patentable and should be allowed. Applicants respectfully traverse each rejection individually below and request reconsideration of claims 1-15.

Claim 10 is objected to under 37 C.F.R. § 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. The Office Action advises that claim 10 should depend on the system of claim 9 instead of the method of claim 9. Applicants have accordingly amended claim 10 to depend from the system of claim 9. Applicants submit that this amendment adds no new matter to the specification and request reconsideration of claim 10 as amended.

## Claim Rejections — 35 U.S.C. § 102 Over Elson

Claims 1-15 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Elson. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As explained in more detail below, Elson does not disclose each and every element of claim 6, and Elson therefore cannot be said to anticipate the claims of the present application within the meaning of 35 USC § 102(e).

Independent claim 6 claims:

A system for control of collaborative devices, the system comprising:  
at least two collaborative devices, wherein each collaborative device comprises a client device and an embedded Java server;

a registry service to which the collaborative devices are coupled for data communications;

at least one registry table, wherein the registry table further comprises registry records, wherein the registry records comprise registry records representing capabilities of collaborative devices, wherein the registry records representing capabilities of collaborative devices further comprise data elements describing, for each collaborative device, capabilities, tertiary relationships, and network connectivities;

a service bundle of OSGI-compliant Java servlets comprising at least one predetermined algorithm for controlling the collaborative devices; and

means for controlling the collaborative devices in accordance with the predetermined algorithm.

**Elson Does Not Disclose At Least Two Collaborative Devices, Wherein Each Collaborative Device Comprises A Client Device And An Embedded Java Server**

The Office Action takes the position that Elson at paragraphs 132 and 133, discloses the first element of claim 6: at least two collaborative devices, wherein each collaborative device comprises a client device and an embedded Java server. Applicants respectfully note in response, however, that what Elson at paragraphs 132 and 133, in fact discloses is:

[0132] FIG. 16 is a block diagram of a gateway/audio subsystem 1602 including the platform software architecture of an embodiment accessing multiple resources to activate an audio speaker 1604, and independently accessing the radio display and buttons 1606. This configuration includes hardware of several types and software. The hardware includes the gateway 1602, the access medium 1608 (a bus, line, etc.), and the CPU resource 1606 (AHU, CD player, radio display). With reference to FIGS. 14, 15, and 16, the J1850 bus 1608 allows the gateway platform 1602 to query the audio state, and to control the audio devices 1606 (CD player, radio, tape player). Requests to redirect the auxiliary input to the speakers 1604 are made via this channel 1608.

[0133] The gateway hosts the software components for physical resource control, as described above. FIG. 17 is a block diagram of the communication flow among the platform components of an embodiment during physical resource control. The software components include the

application 1702, the UAX/UAC (resource managers) 1704, the FUSD module 1712, hardware device drivers 1706, and the hardware API 1708. The nominal flow for a resource request goes through a resource manager 1704 like the UAX/UAC, the hardware device driver 1706, and the hardware API 1708 to finally access the hardware 1710 or physical resource. As described above with reference to FIG. 13, the resource managers (UAX/UAC) 1704 of an embodiment reside in user space and mediate access to the resources 1710. The negotiations among the resource managers (UAX/UAC) 1704 and the applications 1702 pass through the FUSD module 1712.

That is, Elson at column paragraphs 132 and 133, discloses a gateway/audio subsystem for activating an audio speaker. Elson's gateway/audio subsystem for activating an audio speaker does not disclose at least two collaborative devices, wherein each collaborative device comprises a client device and an embedded Java server as claimed in the present application. Elson, at these reference points, does not disclose a collaborative device as claimed in the present application. The Office Action however, takes the position that Figure 16, element 1606 of Elson discloses a collaborative device as claimed in the present application. A collaborative device as claimed in the present application comprises a client device and an embedded Java server. Not one of Elson's "AHU" (Audio Head Unit) 1606, "CD Player" 1606, or "Radio Display Buttons, LEDs" 1606 comprises a client device and embedded Java server. In fact, Elson does not disclose at these reference points anything remotely resembling an embedded Java server as claimed in the present application. Elson, at these paragraphs, does not even mention "Java," a "Java server," or an "embedded Java server" as claimed in the present application. Elson's gateway/audio subsystem for activating an audio speaker does not disclose therefore, at least two collaborative devices, wherein each collaborative device comprises a client device and an embedded Java server as claimed in the present application. Because Elson does not disclose each and every element and limitation of Applicants' claims, Elson does not anticipate Applicants' claims, and the rejections under 35 U.S.C. § 102(e) should be withdrawn.

**Elson Does Not Disclose A Registry Service To Which The Collaborative Devices Are Coupled For Data Communications**

The Office Action takes the position that Elson at paragraph 94, discloses the second element of claim 6: a registry service to which the collaborative devices are coupled for data communications. Applicants respectfully note in response, however, that what Elson at column paragraph 94, in fact discloses is:

[0094] Support for telematics applications under the OSGi begins with installation of the Application Service Bundles 704, which are not directly granted any permissions. This prevents unattended access to private network ports or data by applications not carrying appropriate permissions. However, the Management and Registry Bundle 702, a trusted bundle provided by the TSP or other trusted party, is also installed and will be assigned permissions to OS service accessible via the Java system libraries and JNI. This includes the device file interfaces. The Management and Registry Bundle 702 in an embodiment exploits the Java 2 security framework to prevent Application Service Bundles 704 from gaining unregulated access to its member files and classes. Consequently, for Application Service Bundles 704, access to resources is only possible via the Management and Registry Bundle 702. Finally, the open, standard Management and Registry Bundle 702 accesses system resources via the device driver interface 601.

That is, Elson at paragraph 94, discloses a Management and Registry Bundle that accesses system resources via a device driver interface. Elson's Management and Registry Bundle that accesses system resources via a device driver interface does not disclose a registry service to which the collaborative devices are coupled for data communications as claimed in the present application. A registry service as claimed in the present application is coupled to the collaborative devices for data communications. As explained above in detail, Elson does not disclose a collaborative device as claimed in the present application. Because Elson does not disclose a collaborative device as claimed in the present application Elson cannot disclose a registry service to which the collaborative devices are coupled for data communications as claimed in the present application. Elson's Management and Registry Bundle that accesses system resources via a device driver interface does not disclose therefore a registry service to which the

collaborative devices are coupled for data communications as claimed in the present application. Because Elson does not disclose each and every element and limitation of Applicants' claims, Elson does not anticipate Applicants' claims, and the rejections under 35 U.S.C. § 102(e) should be withdrawn.

**Elson Does Not Disclose At Least One Registry Table, Wherein The Registry Table Further Comprises Registry Records, Wherein The Registry Records Comprise Registry Records Representing Capabilities Of Collaborative Devices, Wherein The Registry Records Representing Capabilities Of Collaborative Devices Further Comprise Data Elements Describing, For Each Collaborative Device, Capabilities, Tertiary Relationships, And Network Connectivities**

The Office Action takes the position that Elson at paragraphs 209 and 218, discloses the third element of claim 6: at least one registry table, wherein the registry table further comprises registry records, wherein the registry records comprise registry records representing capabilities of collaborative devices, wherein the registry records representing capabilities of collaborative devices further comprise data elements describing, for each collaborative device, capabilities, tertiary relationships, and network connectivities. Applicants respectfully note in response, however, that what Elson at paragraph 209, in fact discloses is:

[0209] The access to a service by an application (app) is gated by ACL information stored in the space allocated to that service in the registry. The service provider configures the ACL information in an enterprise registry database (DB). This database synchronizes with the gateway registry using for example secure socket layer (SSL) server certificates, also employing symmetric keys unique to each gateway. Similarly, the software distribution database may communicate using SSL to create secure HTTP sessions with the swap module on the gateway. Communications between the registry and software distribution databases and the various service providers can be by means of an (SV) SOAP interface or some other suitable standard as is known in the art, secured for example by SSL, with client and server certificates. The SWUP content is checked to ensure that all files are owned by the service's UID and are located in their home directory.

And what Elson, at paragraph 218, actually discloses is:

[0218] In operation, the user enters a PIN into the PDA 3004, triggering an authentication exchange. The PIN is verified as one that had been securely entered into the enterprise registry through a remote web access with the appropriate password. When the remote application 3002 is invoked, it registers with the proxy 3020, in this example hosted on the gateway platform 3001, and is assigned a UID with appropriate permissions. The remote application 3002 makes requests for GPS and OBD port data as if directly addressing these devices. However, the request is encapsulated in an IP tunnel and sent to the gateway platform 3001.

That is, Elson at paragraphs 209 and 218, discloses an enterprise registry database in which ACL information is configured by a service provider. Elson's enterprise registry database in which ACL information is configured by a service provider does not disclose at least one registry table, wherein the registry table further comprises registry records, wherein the registry records comprise registry records representing capabilities of collaborative devices, wherein the registry records representing capabilities of collaborative devices further comprise data elements describing, for each collaborative device, capabilities, tertiary relationships, and network connectivities as claimed in the present application. Elson's enterprise registry database synchronizes with the gateway registry and contains ACL information. Elson's enterprise registry does not disclose at least one registry table, wherein the registry table further comprises registry records as claimed in the present application. In fact, at these reference points Elson does not even mention a 'table,' a 'record,' 'registry records,' 'data elements,' 'tertiary relationships,' or 'network connectivities' as claimed in the present application.

In addition to the fact that Elson makes no mention whatsoever to a registry table, or registry records as claimed in the present application, there is another reason that Elson does not disclose the third element of claim 6 of the present application: The registry records as claimed in the present application represent capabilities of collaborative devices. Again, Elson does not disclose a collaborative device as claimed in the present application. Because Elson does not disclose a collaborative device Elson clearly cannot disclose a registry record representing capabilities of collaborative devices as claimed in the present application. That is, Elson's enterprise registry database does not contain a

registry table, wherein the registry table further comprises registry records, wherein the registry records comprise registry records representing capabilities of collaborative devices because Elson does not disclose a collaborative device as claimed in the present application. Elson's enterprise registry database in which ACL information is configured by a service provider does not disclose therefore at least one registry table, wherein the registry table further comprises registry records, wherein the registry records comprise registry records representing capabilities of collaborative devices, wherein the registry records representing capabilities of collaborative devices further comprise data elements describing, for each collaborative device, capabilities. Because Elson does not disclose each and every element and limitation of Applicants' claims, Elson does not anticipate Applicants' claims, and the rejections under 35 U.S.C. § 102(e) should be withdrawn.

**Elson Does Not Disclose A Service Bundle Of OSGI-Compliant  
Java Servlets Comprising At Least One Predetermined Algorithm  
For Controlling The Collaborative Devices**

The Office Action takes the position that Elson at paragraphs 25-26, discloses the fourth element of claim 6: a service bundle of OSGI-compliant Java servlets comprising at least one predetermined algorithm for controlling the collaborative devices. Applicants respectfully note in response, however, that what Elson at paragraphs 25-26, in fact discloses is:

[0025] FIG. 4A shows the OSGi architecture known in the art, including the Java platform architecture. While the OSGi standard specifies methods for delivery and management of applications on remote clients, the standard has many limitations. The standard specification relies on remote service management using servers that access the embedded clients over continuously maintained networks. However, since telematics embedded platforms may operate in an intermittently connected environment, local management of resources and security needs to be added.

[0026] The OSGi standard specifies functionality for bundle installation into the Framework, service registration in a registry created by the Framework, distribution of service references to Bundles, distribution of references to other installed Bundles, publish/subscribe methods for Framework events broadcast, and service discovery, log service, and

Hypertext Transfer Protocol (HTTP) service Bundles. FIG. 4B is a block diagram of a signed application bundle known in the art. The Bundle components include a Signature Block File (.SF signature and Public Key Certificate), Signature File (Hash entries of all JAR files below), Manifest File (Bundle specific information), and Application Files (Application classes).

That is, Elson at paragraphs 25-26, discloses a signed application bundle that includes a Signature Block File, Signature File, Manifest File, and Application Files. Elson's signed application bundle that includes a Signature Block File, Signature File, Manifest File, and Application Files does not disclose a service bundle of OSGi-compliant Java servlets comprising at least one predetermined algorithm for controlling the collaborative devices as claimed in the present application. Elson's signed application bundle only includes, a Signature Block File, Signature File, Manifest File, and Application File. The service bundle as claimed in the present application however includes OSGi-compliant Java servlets comprising at least one predetermined algorithm for controlling a collaborative device as claimed in the present application. Elson does not mention anything remotely resembling a predetermined algorithm for controlling a collaborative device as claimed in the present application. In fact, Elson does not disclose a collaborative device as claimed in the present application and as such cannot disclose an algorithm for controlling such a collaborative device. Elson's signed application bundle that includes a Signature Block File, Signature File, Manifest File, and Application Files does not disclose therefore a service bundle of OSGi-compliant Java servlets comprising at least one predetermined algorithm for controlling the collaborative devices as claimed in the present application. Because Elson does not disclose each and every element and limitation of Applicants' claims, Elson does not anticipate Applicants' claims, and the rejections under 35 U.S.C. § 102(e) should be withdrawn.

#### **Elson Does Not Disclose Means For Controlling The Collaborative Devices In Accordance With The Predetermined Algorithm**

The Office Action takes the position that Elson at paragraph 62, discloses the fifth element of claim 6: means for controlling the collaborative devices in accordance with



the predetermined algorithm. Applicants respectfully note in response, however, that what Elson at paragraph 62, in fact discloses is:

[0062] FIG. 27 is a block diagram of a security architecture that supports resource management and access control so that a host platform and platform users can be protected from each other and from excessive resource consumption, under an embodiment.

That is, Elson at paragraph 62, discloses a security architecture that supports resource management and access control. Elson's security architecture that supports resource management and access control does not disclose means for controlling the collaborative devices in accordance with the predetermined algorithm as claimed in the present application. As explained above in detail, Elson does not disclose a collaborative device or a predetermined algorithm for controlling a collaborative device. Elson cannot disclose therefore means for controlling the collaborative devices in accordance with the predetermined algorithm. That is, the collaborative devices, which are not disclosed by Elson, are controlled in accordance with a predetermined algorithm, which is not disclosed by Elson. Elson's security architecture protects a host platform and platform users from each other and from excessive resource consumption. Elson's security architecture does not however, control a collaborative device in accordance with a predetermined algorithm. Elson's security architecture that supports resource management and access control does not disclose therefore means for controlling the collaborative devices in accordance with the predetermined algorithm as claimed in the present application. Because Elson does not disclose each and every element and limitation of Applicants' claims, Elson does not anticipate Applicants' claims, and the rejections under 35 U.S.C. § 102(e) should be withdrawn.

### **Relations Among Claims**

Independent claims 1 and 11 are method and computer program product claims for control of collaborative devices corresponding to independent system claim 6 that include "providing" and "means, recorded on [a] recording medium, for" control of collaborative

devices. For the same reason that Elson does not disclose a system for control of collaborative devices, Elson also does not disclose methods and computer program products for control of collaborative devices corresponding to independent claims 1 and 11. Independent claims 1 and 11 are therefore patentable and should be allowed.

Claims 2-5, 7-10, and 12-15 depend respectively from independent claims 1, 6, and 11. Each dependent claim includes all of the limitations of the independent claim from which it depends. Because Elson does not disclose each and every element of the independent claims, Elson does not disclose each and every element of the dependent claims of the present application. As such, claims 2-5, 7-10, and 12-15 are also patentable and should be allowed.

### Conclusion


Claims 1-15 stand rejected under 35 U.S.C. § 102 as being anticipated by Elson. Elson does not disclose each and every element of Applicants' claims. Elson therefore does not anticipate Applicants' claims. Claims 1-15 are therefore patentable and should be allowed. Applicants respectfully request reconsideration of claims 1-15.

The Commissioner is hereby authorized to charge or credit Deposit Account No. 09-0447 for any fees required or overpaid.

Respectfully submitted,

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